

## CLAIMS

What is claimed is:

- 1 1. A conditional access (CA) system comprising:
  - 2 a computing resource configured to run a CA protocol;
  - 3 a smart card interface; and
  - 4 a software wrapper configured to couple the smart card interface to the CA
  - 5 protocol.
- 1 2. The CA system of claim 1, wherein the smart card interface complies substantially  
2 with International Organization for Standardization standard 7816 (ISO 7816).
- 1 3. The CA system of claim 1, wherein the CA protocol is selected from the group  
2 consisting of National Renewable Security Standard Part B (NRSS-B), OpenCable™  
3 Host Point Of Deployment Interface Specification (POD), Common Interface  
4 Specification for Conditional Access and other Digital Video Broadcasting Decoder  
5 Applications (CI), and Conditional Access System for Terrestrial Broadcast (ATSC-  
6 A70).
- 1 4. The CA system of claim 1, wherein the software wrapper is configured to run on the  
2 computing resource.
- 1 5. A smart card interface comprising:

2           a smart card receptacle for coupling to a smart card to communicate smart card  
3   signals;  
4           a Personal Computer Memory Card International Association (PCMCIA)  
5   Application Programming Interface (API); and  
6           wrapper software interfacing the smart card signals and the PCMCIA API.

1 6. The smart card interface of claim 5, where the PCMCIA API is a CA API.

1 7. The smart card interface of claim 6, where the smart card signals are received from  
2 an ISO 7816 smart card.

1 8. A conditional access (CA) system comprising:

2 means for executing a CA program;

3 means for coupling to a smart card interface; and

4 means for executing interfacing software.

1 9. The system of claim 8 wherein interfacing software comprises:

2 means for coupling to smart card signals;

3 means for coupling to the CA program API; and

4 means for routing the smart card signals to and from the CA program.

1 10. A conditional access (CA) method comprising:

2 routing signals received from a smart card interface to interface software;

3 coupling an output of the interface software to an API of a CA protocol;

4 coupling an output of the CA protocol to an input of the interface software; and  
5 routing output signals of the interface software to the smart card interface.

1 11. A conditional access (CA) method comprising:

2 routing smart card signals to interface software executing on a first computing  
3 resource;

4 coupling the inputs and outputs of the interface software to a CA protocol

5 executing on a second computing resource; and

6       executing a software wrapper program on a third computing resource coupling a  
7       smart card interface to the CA protocol.

1     12. The method of claim 11 wherein the first computing resource, the second  
2     computing resource, and the third computing resource are a common computing  
3     resource.

1 13. A method for interfacing to a conditional access protocol, the method comprising:

2 receiving signals and data from a smart card interface;

3 transforming the received signals and data from the smart card interface into a  
4 format compatible with the conditional access protocol;

5 presenting the transformed received signals and data from the smart card

6 interface to a conditional access system implementing the conditional access protocol;

7 receiving from the conditional access system signals and data;

8 transforming the received signals and data from the conditional access system

9 into a format compatible with the smart card interface; and

10 presenting the transformed received signals and data from the conditional access  
11 system to the smart card interface.

1 14. The method of claim 13 wherein the smart card interface is an ISO 7816 smart card  
2 interface.

1 15. The method of claim 13 wherein the conditional access protocol is a standard  
2 conditional access protocol.

1 16. The method of claim 15 wherein the standard conditional access protocol is  
2 selected from the group consisting of National Renewable Security Standard Part B  
3 (NRSS-B), OpenCable™ Host Point Of Deployment Interface Specification (POD),  
4 Common Interface Specification for Conditional Access and other Digital Video  
5 Broadcasting Decoder Applications (CI), and Conditional Access System for Terrestrial  
6 Broadcast (ATSC-A70).

1 17. A conditional access (CA) system comprising:  
2 a first computing resource configured to execute a NRSS-B protocol;  
3 an ISO 7816 smart card interface; and  
4 a software wrapper configured to execute on a second computing resource to  
5 couple the ISO 7816 smart card interface to the NRSS-B protocol.

1 18. The system of claim 17 wherein the first computing resource and the second  
2 computing resource are a same computing resource.



